

Claim 1: (currently amended) A filtration system comprising a plurality of modular filtration units, wherein each of said modular filtration units further comprises:

a housing;

a means for interlocking one of said modular filtration units to another modular filtration unit; whereby a joint between said housings is formed, and

a filtration element contained within said housing.

Claim 2. (original) A filtration system as in claim 1 wherein said plurality of modular filtration units interlock together to form a single cell filtration system.

Claim 3 (currently amended) A filtration system as in claim 1 wherein said means for interlocking modular filtration units further comprises:

flanges on said housing of each of said modular filtration units;

a means for sealing a the joint formed between said housings of two adjacent modular filtration units of said plurality of modular filtration units; and

a means for joining said flanges on two adjacent modular filtration units of said plurality of modular filtration units together.

Claim 4. (original) A filtration system as in claim 3 wherein said means for joining further comprises one or more bolts.

Claim 5. (original) A filtration system as in claim 4 wherein said means for sealing is a gasket.

Claim 6. (original) A filtration system as in claim 3 wherein said means for joining further comprises mating sliding-slotted flanges.

Claim 7. (original) A filtration system as in claim 6 wherein said means for sealing is caulking.

Claim 8. (original) A filtration system as in claim 1 wherein said housing is constructed of fibreglass reinforced plastic.

Claim 9. (original) A filtration system as in claim 3 wherein said housing is constructed of fibreglass reinforced plastic.

Claim 10. (original) A filtration system as in claim 1 wherein said filtration element for at least one of said modular filtration units further comprises a biofilter.

Claim 11. (original) A filtration system as in claim 1 wherein said filtration element for at least one of said modular filtration units further comprises a carbon dioxide stripper.

Claim 12. (original) A filtration system as in claim 1 wherein said filtration element for at least one of said modular filtration units further comprises a foam fractionator.

Claim 13. (original) A filtration system as in claim 1 wherein said filtration element for at least one of said modular filtration units further comprises a low head oxygenator.

Claim 14. (original) A filtration system as in claim 1 wherein said filtration element for at least one of said modular filtration units further comprises a UV light sterilization filter.

Claim 15. (original) A filtration system as in claim 1 wherein said filtration element for at least one of said modular filtration units further comprises a mechanical solids filter.

Claim 16. (original) A filtration system as in claim 1 wherein said filtration element for at least one of said modular filtration units further comprises a fine solids polishing filter.

Claim 17. (original) A filtration system as in claim 1 wherein at least one of said modular filtration units further comprises a second filtration element, wherein said first filtration element further comprises a carbon dioxide stripper and said second filtration element further comprises a foam fractionator.

Claim 18. (original) A filtration system as in claim 1 wherein at least one of said modular filtration unit further comprises a second filtration element, wherein said first filtration element

further comprises a UV light sterilization filter and said second filtration element further comprises a low head oxygenator.

Claim 19. (original) A filtration system as in claim 10 wherein said biofilter further comprises a vertical central baffle wall, an air manifold, and biofiltration media.

Claim 20. (original) A filtration system as in claim 19 wherein said biofilter further comprises and inlet, and wherein:

said central baffle wall further comprises a 45 degree extension on the bottom of said baffle wall directed towards said inlet and a 45 degree extension on the top of said baffle wall directed away from said inlet ;

said biofiltration media has a surface area no less than 350m²/m³; and

said air manifold is located near said inlet.

Claim 21. (original) A filtration system as in claim 20 wherein said biofiltration media is constructed of extruded polyethylene.

Claim 22. (original) A filtration system as in claim 20 wherein said biofiltration media is constructed of extruded polystyrene.

Claim 23. (original) A filtration system as in claim 20 wherein said biofilter further comprises an outlet and a retaining screen.

Claim 24. (currently amended) A filtration system comprising two or more modular filtration units, wherein each of said modular filtration units comprises a housing and a filtration element contained within said housing.

Claim 25. (currently amended) A filtration system as in claim 24 wherein said housing further comprises a means for interlocking said housing to the housing of another modular filtration unit, whereby a joint between said housings is formed.

Claim 26. (original) A filtration system as in claim 25 wherein said modular filtration units interlock to form a single volume body.

Claim 27. (currently amended) A filtration system as in claim 26 wherein said means for interlocking modular filtration units further comprises:

flanges on said housing of each of said modular filtration units;

a sealant for sealing the joint formed between said housings of two adjacent modular filtration units of said two or more modular filtration units; and

a means for joining said flanges on two adjacent modular filtration units of said two or more modular filtration units together.

Claim 28. (original) A filtration system as in claim 27 wherein said means for joining further comprises one or more bolts, wherein said sealant further comprises a gasket, and wherein said housing is constructed of fibreglass reinforced plastic.

Claim 29. (original) A filtration system as in claim 27 wherein said filtration element for at least one of said modular filtration units further comprises a biofilter.

Claim 30. (original) A filtration system as in claim 29 wherein said biofilter further comprises an inlet, an outlet, a vertical central baffle wall, an air manifold, a retaining screen, and biofiltration media.

Claim 31. (original) A filtration system as in claim 30 wherein:

said central baffle wall further comprises a 45 degree extension on the bottom of said

baffle wall directed towards said inlet and a 45 degree extension on the top of said

baffle wall directed away from said inlet ;

said air manifold is located adjacent to said inlet;

said biofiltration media is constructed of extruded polymer; and

said retaining screen covers said outlet.

Claim 32. (original) A filtration system as in claim 31 wherein said biofiltration media has a surface area no less than 350m²/m³.

Claim 33. (original) A filtration system comprising a biofilter, wherein said biofilter further comprises an inlet, an outlet, a vertical central baffle wall, an air manifold, a retaining screen, and biofiltration media.

Claim 34. (original) A filtration system as in claim 33 wherein:

said central baffle wall further comprises a 45 degree extension on the bottom of said baffle wall directed towards said inlet and a 45 degree extension on the top of said baffle wall directed away from said inlet ;

said biofiltration media has a surface area no less than 350m²/m³;

said air manifold is located near said inlet; and

said retaining screen covers said outlet.

Claim 35. (original) A filtration system as in claim 34 wherein said biofiltration media is constructed of extruded polymer.

Claim 36. (original) A filtration system as in claim 35 wherein said biofiltration media is constructed of extruded polystyrene.

Claim 37. (original) A filtration system as in claim 35 wherein said biofiltration media is constructed of extruded polyethylene.

Claim 38. (original) A filtration system as in claim 35 further comprising a plurality of modular filtration units, wherein each of said modular filtration units further comprises:

a housing;

a means for interlocking one of said modular filtration units to another modular filtration unit; and

a filtration element; and

wherein said filtration element for at least one of said modular filtration units is said biofilter.